



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,577	10/30/2003	Hiroyuki Nagano	4635-004	7209
22429	7590	10/17/2006	EXAMINER	
LOWE HAUPTMAN BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314			SHAH, MILAP	
			ART UNIT	PAPER NUMBER
			3714	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/696,577	NAGANO, HIROYUKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Milap Shah	3712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 04 August 2006.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                         |

## DETAILED ACTION

This action is in response to the amendment filed August 4, 2006. The Examiner acknowledges that claims 1-3 have been amended, claims 5-20 have been added, and no claims have been canceled. Therefore, claims 1-20 are currently pending.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen et al. (U.S. Patent Application Publication No. 2004/0053699), filed on September 12, 2002 in view of Koizumi (U.S. Patent No. 5,452,025), issued on September 19, 1995.

**Claims 1, 4, 11, & 17:** Rasmussen et al. disclose the invention substantially as claimed including a gaming machine comprising a cabinet in which various components are housed, including a display device (figure 4[display 60]) for showing images, sound generating devices (speakers are inherently enclosed in the cabinet per disclosure of the speaker bar 40 of figure 4) integrated within the cabinet for generating sound according to the game, and sound transmitting holes (figure 4[speaker bar 40]) positioned such that sound coming from the sound generating devices exits the sound transmitting holes (figure 4[speaker bar 40]). Rasmussen et al. also disclose a door that defines a front face of the cabinet, which is openable to allow access to the interior of the cabinet (figure 4 shows the gaming machine with the door and figure 5 shows the gaming machine without the

door, see also description of figures 4 & 5). The door includes openings for the display device and sound transmitting holes (sound bar 40).

Rasmussen et al. specifically lack the speaker or sound transmitting holes are specifically positioned coelevational with the opening for the display device (figure 11 shows the opening) and that sound transmitting passages extend from the sound generating devices to the sound transmitting holes. However, Koizumi discloses a similar display device setup that is capable of being implemented in the cabinet of Rasmussen et al. Koizumi's display device setup includes sound generating devices (figure 1[speaker 3]) being disposed to the rear of the display device setup such that fixed sound transmitting passages extend forwardly from each respective sound generating device to the respective sound transmitting holes on the front of the display set up (see abstract & figures 1, 2, & 5). One of ordinary skill in the art would be motivated to modify the gaming machine and cabinet of Rasmussen et al. to propagate the sounds according to the game in such an area that the player could easily hear the sounds of the game. It is well known that casinos are essentially giant noise filled rooms, thus, one would be motivated to provide directed sound so that excessive volumes from the gaming machine would not be needed. Therefore, it would have been obvious to one of ordinary skill in the art to modify Rasmussen et al. with speakers mounted coelevational (i.e. in the same horizontal plane) with sound transmitting passages as taught by Koizumi in at least figure 5 in order to properly propagate sounds according to the game to a player without utilizing excessive volume in already noise filled casinos.

**Claim 2:** In the implementation of the combination of Rasmussen et al. & Koizumi, it could be seen obvious that the sound transmitting holes on the front of the cabinet door are to be reformed to be the shape of the sound transmitting passage of Koizumi, which is seen to be vertically

elongated (see figure 1 of Koizumi). The combination also provides for having sound transmitting sections on either side of the opening on the front face of the cabinet.

**Claims 3, 5, 6, 10, 12-14, 18, & 19:** The combination of Rasmussen et al. & Koizumi disclose the invention substantially as claimed including the discussion above and the fact that Koizumi discloses sound transmitting passages (figure 1) that are hollow prisms with top, bottom, and side walls.

The combination explicitly lacks the specific formation of the sound transmitting passage having side walls in a trapezoidal shape, thereby creating the various differences in cross sections as the passage extends forwardly from the rear of the cabinet to the front of the cabinet where the sound transmitting holes are located. Since the combination lacks trapezoidal side walls for the sound transmitting passage, it also lacks, as a result, a sound transmitting passage having (a) a substantially constant width and a height that increases as each of the sound transmitting passages extends towards the respective sound transmitting hole, (b) the length or height of rectangular cross sections of the passage increase as each sound transmitting passage extends towards the respective sound transmitting hole, and (c) each of trapezoidal walls has a shorter and longer base, wherein the longer base is disposed forward of and parallel with the shorter base.

Regardless of these deficiencies, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the side walls of Koizumi from a rectangular or square shape to one of a trapezoidal shape, since a review of Applicant's specification has not disclosed that the having the specific trapezoidal side wall shape solves any stated problem or is for any particular purposes and it appears the gaming machine's sound features would perform equally well with side walls of a rectangular or square shape.

Therefore, it would have been *prima facie* obvious to modify the combination of Rasmussen et al. & Koizumi to obtain the inventions as specified in at least claims 3, 5, 6, 10, 12, 13, 14, 18, & 19.

**Claims 7-9, 15, 16, & 20:** Per above discussion of claims 1, 2, 4, 11, & 17, these limitations have been addressed. They are being separated from claims 1, 2, 4, 11, & 17 as they depend from claims 3, 5, 6, 12-14, 18, & 19, where applicable, but can be rejected with the rejection of claims 1, 2, 4, 11, & 17 above. See above rejection for details.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

<u>Name</u>	<u>Reference</u>	<u>Applicability</u>
Davids	U.S. Patent No. 4,517,558	An older display having a front "door" type cover with openings for showing displayed images through.
Sato	U.S. Patent No. 6,035,051	Additional sound propagating reference.
Sugimoto	U.S. Patent No. 6,179,712	Placing a speaker in a gaming machine such that sound is transmitted through a channel and out a hole in the front door of the gaming machine cabinet.
Park	U.S. Patent No. 6,205,299	A television having sound transmitting holes on the left and right side of the front 'plate' or front cover of the television.
Hussaini et al.	U.S. Patent Application Publication No. 2004/0048674	A video display unit for a video game console.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action

is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Milap Shah whose telephone number is (571) 272-1723. The examiner can normally be reached on M-F: 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hotaling can be reached on (571) 272-4437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M.B.S.

*Scott Jones*  
SCOTT JONES  
PRIMARY EXAMINER